



## Pain Management - July 22

### Pain relief

Pain relief is an essential part of caring for any animal but production animals often mask signs of pain and discomfort. Knowing what to use, when to use it and if it has been effective can be a challenge.

We know that proper control of pain not only increases welfare, but can have tangible benefits to milk production and growth rates, as well as longer lasting implications over the course of their lifetime.

### Spotting signs of pain

Cattle are very good at hiding signs of pain and can be quite stoic even when in severe discomfort. When they do eventually show easily recognisable signs of pain they will likely have been suffering for a while beforehand. Being able to recognise an uncomfortable animal as early as possible is one of the best ways of dealing with issues early.

### Early signs of Pain:

- Depression (slow, less responsive, dull)
- Inappetence, looking hollow
- Wide eyes
- Reduced movement or increased laying
- Separation from the group
- Panting or heavy breathing
- Teeth grinding
- Stretched neck and/or hunched back

### Effects of pain

Although difficult to define, pain causes a number of changes in the body. It stimulates the production of cortisol, the stress hormone, which suppresses the immune system and in the long term can reduce growth in calves. In adult cows it can prolong wound healing.

It also causes the release of adrenaline and noradrenaline, transmitters which prepare the body for fight or flight. They also suppress the body's ability to digest and convert feed properly, which over a long period will greatly affect production.

### Benefits of pain relief

As people who care for animals, our first concern is always for welfare. On this reason alone pain relief is an essential part of that care. However, there are also measurable benefits that come from proper use of pain relief.



### MEETINGS COMING UP

#### MEDICINE HANDLING COURSE

@ THE PRACTICE ON  
THURSDAY 28TH JULY  
11AM TO 1PM  
(SUITABLE FOR DAIRY)



#### MEDICINE HANDLING COURSE

@ THE PRACTICE ON  
FRIDAY 23RD SEPTEMBER  
11AM TO 1PM  
(SUITABLE FOR BEEF AND SHEEP)



#### SUSTAINABILITY WALK

SUNDAY 31st July, 2pm @ Manor Farm,  
Garsdon. SN16 9NN

## Growth Rates

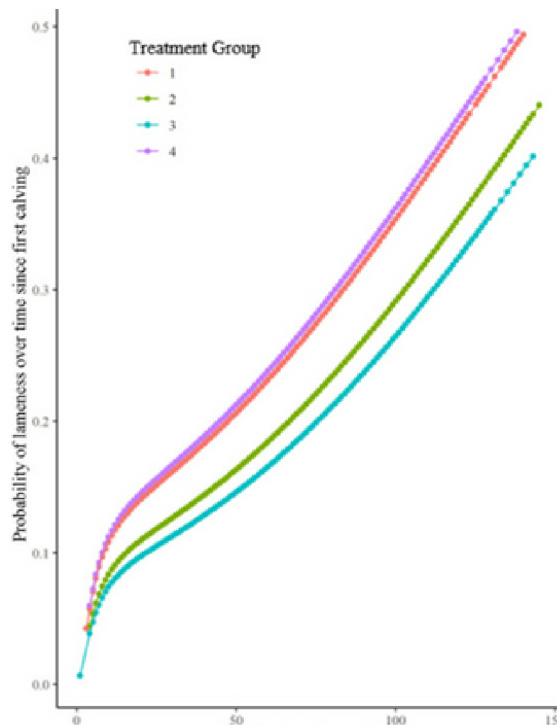
Studies have shown that calves given NSAIDs (for example Metacam or Ketofen) during routine procedures such as disbudding, surgical castration or castrating with a rubber ring, all have reduced levels of cortisol and adrenaline when compared to similar calves who just had local anaesthetic. This was shown in some of the studies to have a knock on effect, increasing growth rates by about 100g per day. The reduction in cortisol also reduce the immunosuppression, keeping the calves healthier.

## Fertility

It's not only calves that benefit though, one study showed that cows with mastitis had a higher cure rate, and were more likely to get in calf at first service if they were treated with a course of tubes and Metacam.

## Lameness

As those of you who attended the Cow Convention will have heard first hand, a recent study has shown that a course of NSAIDs after every calving, *regardless of difficulty of calving*, were shown to have a lower chance of lameness over their entire lifetime. This decrease was even greater when looking at severe lameness- Group 3 in the graph.



## What to use, and when to use it

Pain relief is often a legal requirement for many routine procedures, and even where not it's usually recommended. As Keir pointed out in our last newsletter, Red tractor now require it for any routine calf work where pain is a factor. Knowing what kind of pain relief is required is more essential than ever.

## Nerve blocks

Using a local anaesthetic (such as procaine) to block the sensation in nerves is a legal requirement for disbudding calves over a week old or castrating calves over 2 months. For disbudding, it is recommended 5-10ml each side, with the needle being inserted just behind the eye (between the yellow and orange arrows) as if it were being aimed at the opposite ear.



## We use 3 main NSAIDs:

**Metacam** - Lasts for 48 hours, and has a longer milk and meat withdrawal (120 hours and 15 days respectively). Good for long term pain relief.

**Rimadyl** - Lasts for 24 hours, with no milk withdrawal, but 21 day meat withdrawal. Good for otherwise healthy milking animals, though will likely need to be given over several days.

**Ketofen** - Lasts for 24 hours, with no milk withdrawal, and only 4 days meat withdrawal (1 day if given IV). Good for milking animals, or animals that are likely to be sent for slaughter in the near future.

## NSAIDs

As already mentioned, NSAIDs have a wide variety of uses, and are a good first port of call for dealing with pain. Though not effective for acute or severe pain, NSAIDs can reduce long term aches or pain caused by inflammation or infection.

It is almost always worth giving NSAIDs alongside antibiotic treatment and will often speed up recovery. Metacam in particular, which lasts for 48 hours in cattle, is useful for managing long term pain.

Hoping you've had an excellent spring, despite the changeable weather and are looking forward to the coming months outside.

All the best, Ben J

